Measuring Progress towards Green Growth through indicators

OECD work

UNCEEA
Sixth meeting
New York, 15-17 June 2011
Measuring progress towards Green growth

OECD approach

- Monitoring progress through indicators at the core of the Green Growth Strategy
- Founded on existing work and experience
- Measurement framework
- Proposed list of indicators
  - No composite indicator, rather a set of indicators
  - Selection of 25 indicators; about 20 measurable now
  - Selection criteria: Policy relevance; Analytical soundness; Measurability
  - A dynamic process ← → feedback from countries, from policy use
- Measurement agenda
Measuring progress towards Green growth

**Definition**

Fostering economic growth and development while ensuring that the natural assets continue to provide the resources and environmental services on which our well-being relies.

Catalyse investment and innovation which will underpin sustained growth and give rise to new economic opportunities.
Monitoring progress towards Green growth

Measurement framework

Economic activities (production, consumption, trade)

- Consumption
  - Households
  - Governments

- Investments

Outputs

- Income
- Goods & services
- Residuals

Production

- Multi-factor productivity
- Recycling, re-use, re-manufacturing, substitution

Inputs

- Labour
- Capital
- Resources

Amenities, health & safety aspects

Pollutants

- Waste

Energy & raw materials

- Water, land, biomass, air

Resource functions

Service functions

Sink functions

Natural asset base (capital stocks and environmental quality)

- The socio-economic context and characteristics of growth

1. Indicators monitoring environmental and resource productivity
2. Indicators monitoring the natural asset base
3. Indicators monitoring the environmental quality of life
4. Indicators monitoring economic opportunities and policy responses

Policies, measures, opportunities

- Taxes
- Subsidies
- Regulations
- Investments
- Innovation
- Trade
- Education & training
| The environmental and resource productivity of the economy | - Carbon and energy productivity  
- Resource productivity: materials, nutrients, water  
- Multi-factor productivity |
|----------------------------------------------------------|------------------------------------------------------------------|
| The natural asset base                                   | - Renewable stocks: water, forest, fish resources  
- Non-renewable stocks: mineral resources  
- Biodiversity and ecosystems |
| The environmental dimension of quality of life           | - Environmental health and risks  
- Environmental services and amenities |
| Economic opportunities and policy responses               | - Technology and innovation  
- Production of environmental goods & services  
- International financial flows  
- Prices and transfers  
- Skills and training  
- Regulations and management approaches |
| Socio-economic context and characteristics of growth     | - Economic growth and structure  
- Productivity and trade  
- Labour markets  
- Socio-demographic patterns |
Monitoring progress towards green growth

The foundations

Measuring the progress of societies – OECD work and Global project – GDP and beyond

Monitoring progress towards Green Growth

- Socio-economic context and growth characteristics
- Environmental and resources productivity
- Natural asset base and environmental quality
- Environmental quality of life
- Economic opportunities and policies

Review & selection:
- Policy relevance
- Analytical soundness
- Measurability

OECD indicators and statistical databases

- Economic performance
  - National accounts
  - Productivity
- Employment
- Education
- Environmental performance
  - Material flows and resource productivity
- Science & Technology
  - Innovation
  - Entrepreneurship
- Energy
  - Agriculture
  - Trade
  - Transport
- Development aid
  - Investment

UNEP indicators
EU indicators
SEEA
Member countries
IGOs
Climate change (1) 1990-2000: relative decoupling on the production side...but hardly absolute decoupling
Climate change (2) 2000-2009: broad relative decoupling on the production side...some more absolute decoupling
Climate change (3): differences between production and demand-based emissions
Economic opportunities: to date, ‘Green industries’ represent a modest share of the economy…

But:
• classifications matter
• type of product or sector is only part of the picture

→ How best to monitor the transitions? And characterize the greening of the economy?
Monitoring progress towards green growth

...many measurement and data issues remain... (1)

- **Getting the indicators right**
  - Balance between ‘green’ and ‘growth’
  - Relevance for policy analysis/evaluation, for communication
  - Relevance for international work, for countries

- **Improving the quality of measurement**
  - Importance of consistent accounting system to combine economic and environmental data (SEEA)

- **Filling gaps**
  - Sectoral data → structural changes
  - Measuring natural assets (stocks, flows)
    - physical values: biodiversity; land use; mineral resources
    - monetary values
  - Measuring material flows and resource productivity
Monitoring progress towards green growth

...many measurement and data issues remain... (2)

- **Filling gaps**
  - Measuring innovation and investment
  - Measuring the “greening” of economic sectors
  - Monitoring regulatory approaches
  - Measuring health and risks → economic impacts

- Embed green growth measurement into existing growth accounting frameworks and productivity measures

- Identify a small set of headline indicators
Monitoring progress towards green growth

Next steps

• CSTAT (16-17 June 2011); WPEI (15-17 November 2011)

• Refine indicator set

• Identify headline indicators
  – Small task force: correlation, criteria
  – Coordination with UNEP GE indicators

• Contribute to SEEA implementation
  – Land; non-energy and energy mineral resources
  – Timber resources

• Extended growth accounting
  – Growth contributions of natural assets
  – Valuation of land and selected natural resources

• Mainstream GG in country studies and in policy analysis (Going for growth)

• Next report end 2012-Q1 2013